

# Camp NERF (Nutrition Education Recreation and Fitness): A Summer Intervention Designed to Empower Disadvantaged Children to Make Healthy Dietary and Physical Activity Choices and Prevent Unhealthy Weight Gain

## Purpose

Childhood obesity negatively affects the physical and mental health of the child, and also academic success. Many school-age children experience unhealthy weight gain during the summer. There is a need for evidence-based nutrition and physical activity programs to equip children with the knowledge, skills, and resources to prevent unhealthy weight gain during this time.

## Aims:

1) Develop an innovative theory-based 10-week multi-component daily nutrition/physical activity summer program for disadvantaged school-age children grounded in an existing evidence-based curriculum and infused with cognitive behavioral techniques (Camp NERF);

2) Evaluate efficacy of Camp NERF on improvements in child nutrition, physical activity, weight status;

3) Determine extent to which improvements in these outcomes are mediated by child cognitive behavior variables;

4) Evaluate efficacy of Camp NERF on improvements in secondary child outcomes related to mental health and learning;

5) Evaluate efficacy of Camp NERF on improvements in parent self-efficacy for establishing healthy family practices. Central hypothesis: Camp NERF Children, versus the control, will: increase consumption of nutrient-rich foods, lower intake of energy-dense foods; increase daily physical activity, decrease sedentary behaviors; achieve healthy weight gain trajectory.

## Additional hypotheses:

1) Nutrition and physical activity outcomes will be mediated by theory-based mediators, self-efficacy and outcome expectancy;

2) Camp NERF children will demonstrate improved mental health and learning outcomes;



3) Parents of Camp NERF children will increase self-efficacy for healthy family practices. Impact: Camp NERF will serve as a prototype for summer programs aimed at achieving optimal nutrition, physical activity, and wellness in children during the summer.

## Impact

Evaluate efficacy of Camp NERF on improvements in primary child outcomes related to 1) nutrition (fruits and vegetables, foods high in solid fats and added sugars), 2) physical activity (structured and unstructured physical activity, moderate to vigorous physical activity (MVPA), sedentary behaviors, screen time), and 3) weight status (BMI percentile; z-score)

Evaluate efficacy of Camp NERF on improvements in secondary child outcomes related to 1) mental health (self-concept, mood, and behavior) and 2) learning (motivation to learn)

Evaluate efficacy of Camp NERF on improvements in parent self-efficacy for establishing healthy family nutrition and physical activity practices (nutrition: regular family mealtime; physical activity: structured and unstructured physical activity, sedentary behaviors, screen time)



THE OHIO STATE  
UNIVERSITY



## Ohio State Colleges/Units Involved

College of Education and  
Human Ecology:

Dept of Human Sciences (Ana' Brown, MS student; Angela Rose, PhD Student; Julie Kennel, Director; Jacqueline Goodway, Associate Professor; Keeley Pratt, Assistant Professor; Ana Claudia Zubieta, Director)

Dept of Teaching & Learning (Laura Justice, Professor)

College of Nursing (Bernadette Melnyk, Dean and Professor)

College of Medicine, Dept of Psychiatry (Mary Fristad, Professor); Nationwide Children's Hospital (Ihuoma Eneli, Professor)

## Community Partners Involved

Children's Hunger Alliance

## Contact

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